

WHAT IS CLAIMED IS:

1. An information processing apparatus for detecting inter-track boundaries, comprising:

noise eliminating means for generating noise eliminated audio data by performing a noise eliminating process to audio data generated by digitally converting analog audio signals of music of a plurality of tracks whose inter-track boundaries are produced of silent portions;

presumed inter-track boundaries detecting means for detecting presumed inter-track boundaries presumed to be the inter-track boundaries for said plurality of tracks based on the portions of said noise eliminated audio data whose signal levels are lower than a predetermined level threshold value; and

inter-track boundaries specifying means for specifying said inter-track boundaries based on the inter-track boundaries specifying information of said presumed inter-track boundaries detected by said presumed inter-track boundaries detecting means.

2. The information processing apparatus according to Claim 1, wherein

said inter-track boundaries specifying means specifies as said inter-track boundaries said presumed inter-track boundaries dividing said presumed tracks whose presumed track playing times of presumed tracks presumed to be tracks divided by said inter-track boundaries are greater than said minimum playing time and

smaller than said greatest playing time, using the minimum playing time and the greatest playing time of said plurality of tracks as said inter-track boundaries specifying information.

3. The information processing apparatus according to Claim 1, wherein

said inter-track boundaries specifying means presumes said presumed inter-track boundaries as said inter-track boundaries based on an error between the presumed track playing time of presumed tracks presumed to be tracks divided by said presumed inter-track boundaries and said playing time, using the playing time of each of said plurality of tracks as said inter-track boundaries specifying information.

4. The information processing apparatus according to Claim 1, wherein:

said inter-track boundaries specifying means compares the number of presumed tracks for the presumed tracks presumed to be tracks divided by said presumed inter-track boundaries detected by said presumed inter-track boundaries detecting means with said number of tracks, using the number of tracks of said plurality of tracks as said inter-track boundaries specifying information; and

said presumed track number detecting means, in case the number of said presumed tracks is smaller than the number of said tracks, according to the results of said comparison by said

inter-track boundaries specifying means, tries to detect once more said presumed inter-track boundaries based on the portions of said noise eliminated audio data whose signal levels are lower than the other level threshold values greater than said level threshold value,.

5. An information processing method for detecting inter-track boundaries, comprising:

the noise eliminating step of generating noise eliminated audio data by performing a noise eliminating process to audio data generated by digitally converting analog audio signals of music of a plurality of tracks whose inter-track boundaries are produced of silent portions;

the presumed inter-track boundaries detecting step of detecting presumed inter-track boundaries presumed to be the inter-track boundaries for said plurality of tracks based on the portions of said noise eliminated audio data whose signal levels are lower than a predetermined level threshold value; and

the inter-track boundaries specifying step of specifying said inter-track boundaries based on the inter-track boundaries specifying information of said detected presumed inter-track boundaries detected.

6. An information processing program to detect inter-track boundaries, the program causing a computer to perform:

the noise eliminating step of generating noise eliminated audio data by performing a noise eliminating process to audio data generated by digitally converting analog audio signals of music of a plurality of tracks whose inter-track boundaries are produced of silent portions;

the presumed inter-track boundaries detecting step of detecting presumed inter-track boundaries presumed to be the inter-track boundaries for said plurality of tracks based on the portions of said noise eliminated audio data whose signal levels are lower than a predetermined level threshold value; and

the inter-track boundaries specifying step of specifying said inter-track boundaries based on the inter-track boundaries specifying information of said detected presumed inter-track boundaries detected.